

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

MARUOKA

Atty. Ref.: 4815-2

Serial No. unknown

TC/A.U.: unknown

Filed: January 9, 2006

Examiner: Unknown

For: OPTICALLY ACTIVE QUATERNARY AMMONIUM SALT, PRODUCTION
METHOD THEREOF, AND METHOD FOR PRODUCING OPTICALLY ACTIVE α -
AMINO ACID DERIVATIVE USING THE QUATERNARY AMMONIUM SALT

* * * * *

January 9, 2006

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

As suggested by 37 C.F.R. 1.97, the undersigned attorney brings to the attention of the Patent and Trademark Office the references listed on the attached form PTO/SB/08a. A copy of the International Search Report and each listed reference is attached.

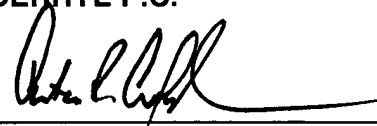
This is not to be construed as a representation that a search has been made or that no better prior art exists, or that a reference is relevant merely because cited.

The Examiner is requested to initial the attached form PTO/SB/08a and to return a copy of the initialed document to the undersigned as an indication that the attached references have been considered and made of record.

Respectfully submitted,

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INFORMATION DISCLOSURE
CITATION

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APPLICANT

MARUOKA

(Use several sheets if necessary)

FILING DATE

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	OOI et al., "Direct Asymmetric Aldol Reactions of Glycine Schiff Base with Aldehydes Catalyzed by Chiral Quaternary Ammonium Salts", <i>Angew Chem Int. Ed.</i> , 2002, Vol. 41, No. 23, Pgs. 4542-4543
	OOI et al., "Highly Stereoselective N-Terminal Functionalization of Small Peptides by Chiral Phase-Transfer Catalysis", <i>Angew. Chem. Int. Ed.</i> , 2003, Vol. 42, No. 5, Pgs. 579-582
	OOI, et al., "Facile synthesis of L-Dopa <i>tert</i> -butyl ester by catalytic enantioselective phase-transfer alkylation", <i>Tetrahedron Letters</i> , 2000, Vol. 41, Pgs. 8339-8342
	CHINCHILLA et al., "Asymmetric synthesis of α -amino acids using polymer-supported <i>Cinchona</i> alkaloid-derived ammonium salts as chiral phase-transfer catalysts", <i>Tetrahedron, Asymmetry</i> , Vol. 11, 2000, Pgs. 3277-3281
	THIERRY et al., "Solution- and Solid-Phase Approaches in Asymmetric Phase-Transfer Catalysis by Cinchona Alkaloid Derivatives", <i>Synthesis</i> 2001, No. 11, Pgs. 1742-1746
	THIERRY et al., "New polymer-supported chiral phase-transfer catalysts in the asymmetric synthesis of α -amino acids: the role of a spacer", <i>Tetrahedron, Asymmetry</i> , Vol. 12, 2001, Pgs. 983-986
	DANELLI et al., "Immobilization of catalysts derived from <i>Cinchona</i> alkaloids on modified poly(ethylene glycol)", <i>Tetrahedron: Asymmetry</i> , Vol. 14, 2003, Pgs. 461-467
	JEW et al., "An Unusual Electronic Effect of an Aromatic-F in Phase-Transfer Catalysts Derived from <i>Cinchona</i> -Alkaloid", <i>Organic Letters</i> , 2002, Vol. 4, No. 24, Pgs. 4245-4248
	OOI et al., "Design of <i>N</i> -Spiro C ₂ -Symmetric Chiral Quaternary Ammonium Bromides as Novel Chiral Phase-Transfer Catalysts: Synthesis and Application to Practical Asymmetric Synthesis of α -Amino Acids, <i>J. AM. CHEM. SOC.</i> , 2003, Vol. 125, No. 17, Pgs. 5139-5151
	OOI et al., "Designer Chiral Quaternary Ammonium Bifluorides as an Efficient Catalyst for Asymmetric Nitroaldol Reaction of Silyl Nitronates with Aromatic Aldehydes", <i>J. AM. CHEM. SOC.</i> , 2003, Vol. 125, No. 8, Pgs. 2054-2055
	NAKAMURA et al., "Preparation of a Fluorous Chiral BINOL Derivative and Application to an Asymmetric Protonation Reaction", <i>Tetrahedron</i> , Vol. 56, 2000, Pgs. 351-356
	NAKAMURA et al., "Recyclable fluorous chiral ligands and catalysts: asymmetric addition of diethylzinc to aromatic aldehydes catalyzed by fluorous BINOL-Ti complexes", <i>Tetrahedron</i> 58, 2002, Pgs. 3963-3969
	TIAN et al., "Asymmetric catalytic carbon-carbon bond formations in a fluorous biphasic system based on perfluoroalkyl-BINOLs", <i>Tetrahedron</i> 58, 2002, Pgs. 3951-3961
	MAILLARD et al., "Chiral perfluorous analogues of MOP. Synthesis and applications in catalysis", <i>Tetrahedron, Asymmetry</i> , Vol. 13, 2002, Pgs. 1449-1456
	CAVAZZINI et al., "Palladium-catalysed asymmetric allylic alkylation in the presence of a chiral 'light fluorous' phosphine ligand", <i>Chem. Comm.</i> 2001, Pgs. 1220-1221
	MAILLARD et al., "Asymmetric hydrogen transfer reduction of ketones using chiral perfluorinated diimines and diamines", <i>Tetrahedron</i> , Vol. 58, 2002, Pgs. 3971-3976
	POZZI et al., "Enantioselective Catalysis in Fluorinated Media - Synthesis and Properties of Chiral Perfluoroalkylated (Salen)manganese Complexes", <i>Eur. J. Org. Chem.</i> , 1999, Pgs. 1947-1955
	CAVAZZINI et al., "Second-generation fluorous chiral (salen) manganese complexes", <i>Chem. Commun.</i> , 2000, Pgs. 2171-2172
	CAVAZZINI et al., "Hydrolytic kinetic resolution of terminal epoxides catalyzed by fluorous chiral Co(salen) complexes", <i>Tetrahedron</i> , Vol. 58, 2002, 3943-3949
	NAKAMURA et al., "Enantioselective addition of diethylzinc to aldehydes catalyzed by fluorous β -aminoalcohols", <i>Tetrahedron</i> , Vol. 57, 2001, Pgs. 5565-5571
	KLEIJN et al., "Synthesis of Arylzinc Thiolates Containing Perfluoroalkyl Chains. Model Catalyst Precursors for the Enantioselective Zinc-Mediated 1,2-Addition of Dialkylzincs to Aldehydes in Fluorous Biphasic Systems", <i>Organic Letters</i> , 1999, Vol. 1, No. 6, Pgs. 853-855

*Examiner

Date Considered

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.